

## SOLAR DECATHLON

## **NEWS MEDIA CONTACTS:**

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## Innovative Energy Savings On Display in Solar Village on National Mall

Houses Arriving in Washington, D.C. for Oct. 7-16 Solar Decathlon

WASHINGTON, D.C. In advance of the DOE Solar Decathlon, a "solar village"

has taken shape on the National Mall. Solar powered and highly efficient houses from across the country and as far away as Spain, Canada and Puerto

Rico are arriving in Washington, D.C. for the start of the 2005 Solar Decathlon. The Solar Decathlon brings together cutting-edge architecture, engineering, and technology in homes that generate as much, or more, energy than they consume.

"These future engineers and architects are developing the most innovative cutting edge technology," Secretary of Energy Samuel W. Bodman said. "Although the homes may seem fun and futuristic, the materials they use are available to anyone. These homes are living demonstrations of the transformative power of innovation. They demonstrate that we can have homes today that use less energy without giving up any of the comforts we now enjoy."

University teams will compete to determine who has built the house that best blends aesthetics and modern conveniences with maximum energy production and optimal efficiency. For two years, the teams have worked on their designs, raised funds, conducted research, and built and tested their houses. Over eight days the teams will be judged in 10 areas encompassing architecture, livability, comfort, power generation for space heating and cooling, water heating, and powering lights and appliances. Each solar house must also produce enough "extra" power for an electric car. Opening ceremonies begin on Oct. 6.

The competition promises to show the public some very innovative approaches to home design. The University of Colorado's house, for example, uses natural materials, including Bio-SIPs, a patented structural insulated panel system made of cellulose waste and soy foam insulation. The house is also constructed with wheat, corn, flax, sunflower, canola, coconut and coffee.

















The University of Madrid's house, named the "Magic Box," features movable interior walls, allowing occupants to modify their living space to suit their daily needs.

The New York Institute of Technology's "Green Machine/Blue Space" differs from the other houses in that it uses a hydrogen-fuel cell instead of batteries to store the sun's energy. Electricity from a roof-mounted photovoltaic system separates hydrogen from water through electrolysis. The hydrogen is then stored and used in a fuel cell to produce electricity and heat on demand.

The Florida International University team took into account the nature of the environment in their part of the country; the house has windows and doors designed to withstand hurricane force winds.

Visitors to the Mall are encouraged to participate in energy-efficient workshops, tour the houses and explore educational exhibits. Except for Oct. 12, when the houses will be closed for competition purposes, the solar village will be open for house tours from 11 a.m. - 4 p.m. weekdays and from 9 a.m. - 6 p.m. weekends.

The primary sponsor of the Solar Decathlon is DOE's Office of Energy Efficiency and Renewable Energy, with its National Renewable Energy Laboratory and private-sector sponsors the American Institute of Architects, the National Association of Home Builders, BP, the DIY Network and Sprint Nextel.

Editors' notes: For more information and a complete list of teams, go to <a href="www.solardecathlon.org">www.solardecathlon.org</a>. Reporters and photographers are invited to cover the building of the Solar Village on the National Mall. Professional high-resolution JPEG photos with photo captions will be also available at the Solar Decathlon web site, www.solardecathlon.org or <a href="https://www.eere-pmc.energy.gov/sd05">https://www.eere-pmc.energy.gov/sd05</a> and will be updated daily during the competition. Please contact John Horst at 303/434-2823 or john.horst@go.doe.gov for questions about photos.

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